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10/089,561	05/28/2002	Rainer Mangold		3281

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EXAMINER

PIERCE, JEREMY R

ART UNIT	PAPER NUMBER
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1771

DATE MAILED: 12/18/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/089,561

Applicant(s)

MANGOLD ET AL.

Examiner

Jeremy R. Pierce

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1771

[Handwritten signature]

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 19 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 19, the phrase "layer-like" renders the claim indefinite because the claim includes elements not actually disclosed (those encompassed by "or the like"), thereby rendering the scope of the claim(s) unascertainable. See MPEP § 2173.05(d).
How is it like a layer?

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 4, 5, 7-10, and 12-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Newkirk (U.S. Patent No. 4,883,707).

Newkirk discloses a nonwoven fabric comprising a carded web layer having an average denier of 3 or greater bonded to a thermoplastic fibrous layer having an

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average denier of 3 or less (column 2, lines 39-44). The low denier layer meets Applicant's claim limitations for the upper layer because the claimed range of at most 3.5 dtex falls within less than 3 denier the low denier layer comprises bicomponent fibers with optionally 30% single component fiber (column 3, lines 42-55). The high denier layer meets Applicant's claim limitations for the lower layer because greater than 3 denier falls within the claimed range of between 4 and 10 dtex falls within greater than 3 denier and is made from bicomponent fibers with the higher melting component is made from PET (column 3, lines 20-34). Also, the lower melting point part of the bicomponent fibers are the only ones that melt, so they would have a lower melting point than the mono-component fibers (column 4, lines 2-6). With regard to claims 4 and 5, Newkirk discloses the low denier layer has a basis weight in the range of 5 to 20 grams per square yard (column 2, line 59). With regard to claims 7-9, the high denier layer may be comprised entirely of bicomponent fibers (column 3, lines 4-7). With regard to claim 10, the fiber may be sheath/core (column 3, line 6). With regard to claim 14, the lower melting point component may be polyethylene (column 3, line 25). With regard to claim 15, the coverstock disclosed by Newkirk is used with an absorbent layer and an impermeable outer covering (column 1, lines 15-18).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 4-10, and 12-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barge et al. (U.S. Patent No. 5,989,688).

Barge et al. disclose a composite nonwoven for controlled acquisition and distribution of liquid comprising a first support layer and a first bulky layer, the two layers being bonded by thermobonding (Abstract). The support layer may function as the coverstock in an absorbent article (column 4, lines 32-39), and would therefore be the body-contacting layer. Barge et al. disclose the support layer fibers preferably have a dtex of 1.7 to 3.3 (column 6, line 35). Barge et al. also disclose the support layer may be made from a mixture of single component fibers and bicomponent fibers (column 6, lines 18-28). However, Barge et al. fail to disclose that this mixture comprises 30-70% by weight bicomponent fibers. However, discovering the optimum ratio of bicomponent fibers to single component fibers would be an obvious matter of optimizing a result effective variable. Addition of more bicomponent fibers in the nonwoven would strengthen the bonding of the fabric at the expense of feel and increased stiffness. It would have been obvious to a person having ordinary skill in the art at the time of the invention to use between 30-70% bicomponent fibers in the support layer of Barge et al. since Barge et al. disclose using a blend of single component and bicomponent fibers and it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980). The bulky layer meets the limitations of the lower layer because Barge et al. disclose the fibers are in the range of 5-12 dtex (column 6, lines 63-64) and may consist

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essentially of bicomponent fibers (column 6, line 46) that contain PET (column 6, lines 7-11). With regard to claims 4 and 5, Barge et al. disclose the support layer may weight between 6 and 20 grams per square meter (column 7, line 65 –column 8, line 7). With regard to claim 6, the fibers are treated to be hydrophilic (column 7, lines 38-39). With regard to claims 7-9, Barge et al. disclose the bulky layer may consist essentially of bicomponent fibers (column 6, line 46). With regard to claim 10, the fibers may be sheath/core fibers (column 7, lines 41-43). With regard to claim 14, the lower melting part may be polyethylene (column 6, line 9). With regard to claim 15, Newkirk discloses hygienic absorbent products also comprise an absorbent core and an impermeable backsheet (column 1, lines 15-23).

7. Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Newkirk in view of Winebarger (U.S. Patent No. 5,057,357).

Newkirk discloses pattern bonding through air (column 4, lines 13-24), but fail to disclose creating a textured pattern through calendering. Winebarger teach that a softer coverstock may be achieved by calendering the nonwoven and creating a pattern with a bond area of 7.5 to 30% (column 5, lines 13-16). It would have been obvious to a person having ordinary skill in the art at the time of the invention to create a textured pattern by calendering the coverstock of Newkirk in order to create a softer material, as taught by Winebarger.

8. Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barge et al. in view of Winebarger.

Barge et al. disclose the preferred method of bonding is by thermobonding using calender bonding (column 9, lines 19-22), but do not disclose forming a textured pattern. Winebarger teach that a softer coverstock may be achieved by calendering the nonwoven and creating a pattern with a bond area of 7.5 to 30% (column 5, lines 13-16). It would have been obvious to a person having ordinary skill in the art at the time of the invention to create a textured pattern by calendering the coverstock of Barge et al. in order to create a softer material, as taught by Winebarger.

9. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Newkirk in view of Barge et al.

Newkirk fail to disclose treating the upper layer with a hydrophilic finish. Barge et al. disclose that coverstock fabrics are preferably treated to be hydrophilic in order to better acquire and distribute aqueous liquids such as urine (column 7, lines 33-35). It would have been obvious to a person having ordinary skill in the art at the time of the invention to provide the topsheet of Newkirk with a hydrophilic finish in order to create a coverstock that can better acquire and distribute aqueous liquids, as taught by Barge et al.

10. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Newkirk in view of Lloyd et al. (U.S. Statutory Invention Reg. No. H1698).

Newkirk does not disclose the lower layer to contain eccentric core/sheath fibers. Lloyd et al. teach that bicomponent core/sheath fibers having an eccentric core are preferably used in absorbent articles to provide a lower density structure due to the greater tendency of such fibers to take on a curled shape (column 8, lines 2-7). It would

have been obvious to a person having ordinary skill in the art at the time of the invention to use eccentric sheath/core fibers in the absorbent article of Newkirk in order to provide a lower density structure for acquiring and distributing liquids, as taught by Lloyd et al.

11. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Barge et al. in view of Lloyd et al.

Barge et al. not disclose the lower layer to contain eccentric core/sheath fibers. Lloyd et al. teach that bicomponent core/sheath fibers having an eccentric core are preferably used in absorbent articles to provide a lower density structure due to the greater tendency of such fibers to take on a curled shape (column 8, lines 2-7). It would have been obvious to a person having ordinary skill in the art at the time of the invention to use eccentric sheath/core fibers in the absorbent article of Barge et al. in order to provide a lower density structure for acquiring and distributing liquids, as taught by Lloyd et al.

12. Claims 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Newkirk in view of Hermann et al. (DE 4,338,326). An English translation to the reference has been ordered and will be provided with the next Office Action.

Newkirk discloses the limitations of the fluid-permeable layer as set forth above in section 4, but Newkirk fails to disclose the structure for the absorbent core or retaining layer. Hermann et al. disclose an absorbent core material having multiple layers. It would have been obvious to a person having ordinary skill in the art at the time of the invention to use the absorbent core of Hermann et al. in the product of Newkirk in order to provide an absorbent product with sufficient acquisition and

distribution properties. With regard to claim 16 the upper layer 26 is made of cross-linked cellulose to provide distribution (column 3, lines 3-10). Hermann et al. teach adding superabsorbent material to upper layer 26 (column 4, lines 33-39), but do not disclose the amount. The amount of superabsorbent material is a result effective variable that would affect the absorption of liquid properties and the distribution properties of the upper layer. It would have been obvious to a person having ordinary skill in the art at the time of the invention to use between 8 and 15% superabsorbent material in the upper layer in order to provide optimal absorbency and distribution of liquid, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. With regard to claim 17, Hermann et al. teach a lower layer of conventional cellulose fibers and superabsorbent being present in an amount between 10 and 98% by weight (column 3, lines 11-19). Although Hermann et al. do not explicitly teach the ratio of fiber mass to fluid storage, it is reasonable to presume that said limitations are inherent to the invention. Support for said presumption is found in the use of similar materials (i.e. cellulose) and in the similar production steps (i.e. cross-linking for the upper layer and conventional for the lower layer) used to produce the absorbent core. The burden is upon the Applicant to prove otherwise. *In re Fitzgerald*, 205 USPQ 594. In the alternative, optimizing the absorption and distribution properties as a result effective variable would obviously have provided the claimed ratios. With regard to claim 19, Hermann et al. disclose an additional lower layer that may not contain any superabsorbent material (column 3, line 66 –column 4, line 2).

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13. Claims 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barge et al. in view of Hermann et al.

Barge et al. disclose the limitations of the fluid-permeable layer as set forth above in section 6, and also teach the addition of various layers to obtain desired characteristics of acquisition and distribution (column 1, lines 15-27). But Barge et al. fail to disclose the structure for the absorbent core or retaining layer. Hermann et al. disclose an absorbent core material having multiple layers. It would have been obvious to a person having ordinary skill in the art at the time of the invention to use the absorbent core of Hermann et al. in the product of Barge et al. in order to provide an absorbent product with sufficient acquisition and distribution properties. With regard to claim 16, the upper layer 26 is made of cross-linked cellulose to provide distribution (column 3, lines 3-10). Hermann et al. teach adding superabsorbent material to upper layer 26 (column 4, lines 33-39), but do not disclose the amount. The amount of superabsorbent material is a result effective variable that would affect the absorption of liquid properties and the distribution properties of the upper layer. It would have been obvious to a person having ordinary skill in the art at the time of the invention to use between 8 and 15% superabsorbent material in the upper layer in order to provide optimal absorbency and distribution of liquid, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. With regard to claim 17, Hermann et al. teach a lower layer of conventional cellulose fibers and superabsorbent being present in an amount between 10 and 98% by weight (column 3, lines 11-19). Although Hermann et al. do not explicitly teach the ratio of fiber

mass to fluid storage, it is reasonable to presume that said limitations are inherent to the invention. Support for said presumption is found in the use of similar materials (i.e. cellulose) and in the similar production steps (i.e. cross-linking for the upper layer and conventional for the lower layer) used to produce the absorbent core. The burden is upon the Applicant to prove otherwise. *In re Fitzgerald*, 205 USPQ 594. In the alternative, optimizing the absorption and distribution properties as a result effective variable would obviously have provided the claimed ratios. With regard to claim 19, Hermann et al. disclose an additional lower layer that may not contain any superabsorbent material (column 3, line 66 –column 4, line 2).

14. Claims 16-19 are rejected under 35 U.S.C. 103(a) as being obvious over Malowaniec (U.S. Patent No. 6,630,611) in view of Newkirk.

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer

in accordance with 37 CFR 1.321(c). For applications filed on or after November 29, 1999, this rejection might also be overcome by showing that the subject matter of the reference and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person. See MPEP § 706.02(l)(1) and § 706.02(l)(2).

Malowaniec discloses the claimed retaining element (column 4, lines 7-23). Malowaniec fail to disclose the claimed fluid-permeable layer. As set forth above in section 4, Newkirk teaches all of the claimed elements of the fluid-permeable layer. It would have been obvious to a person having ordinary skill in the art at the time of the invention to use the Newkirk coverstock in the absorbent article of Malowaniec in order to provide strength and softness to the absorbent article, as taught by Newkirk.

15. Claims 16-19 are rejected under 35 U.S.C. 103(a) as being obvious over Malowaniec in view of Barge et al.

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and

reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). For applications filed on or after November 29, 1999, this rejection might also be overcome by showing that the subject matter of the reference and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person. See MPEP § 706.02(I)(1) and § 706.02(I)(2).

Malowaniec discloses the claimed retaining element (column 4, lines 7-23). Malowaniec fail to disclose the claimed fluid-permeable layer. As set forth above in section 6, Barge et al. teach all of the claimed elements of the fluid-permeable layer. It would have been obvious to a person having ordinary skill in the art at the time of the invention to use the Barge et al. coverstock in the absorbent article of Malowaniec in order to provide controlled acquisition and distribution to the absorbent article, as taught by Barge et al.

Double Patenting

16. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

17. Claims 16-19 rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-5 of U.S. Patent No. 6,630,611 in view of Newkirk. The reasons for the double patenting rejection are the same as set forth above in section 14.

18. Claims 16-19 rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-5 of U.S. Patent No. 6,630,611 in view of Barge et al. The reasons for the double patenting rejection are the same as set forth above in section 15.

Conclusion

19. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: U.S. Patent No. 6,414,216 to Malowaniec.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeremy R. Pierce whose telephone number is (703) 605-4243. The examiner can normally be reached on Monday-Thursday 7-4:30 and alternate Fridays 7-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (703) 308-2414. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

JRP
JRP

Elizabeth M. Cole
ELIZABETH M. COLE
PRIMARY EXAMINER